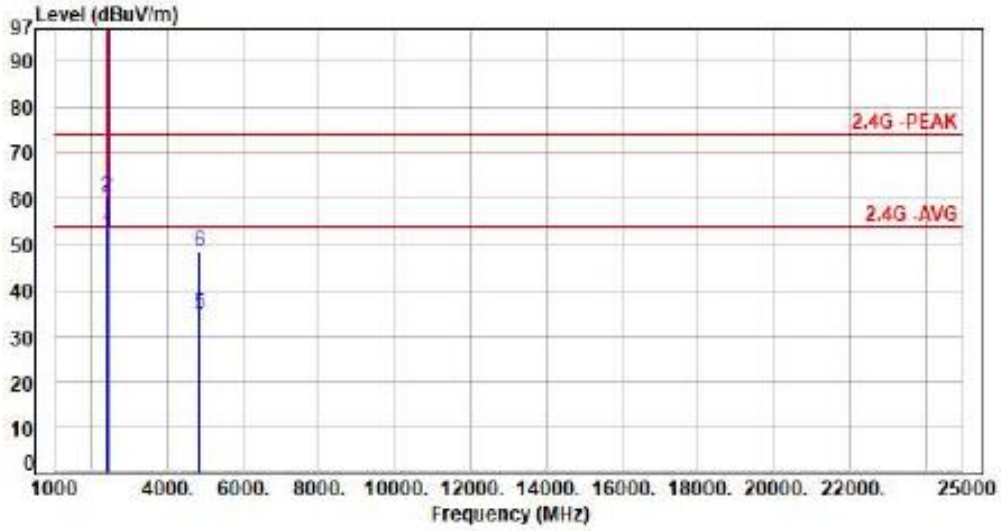
MIMO

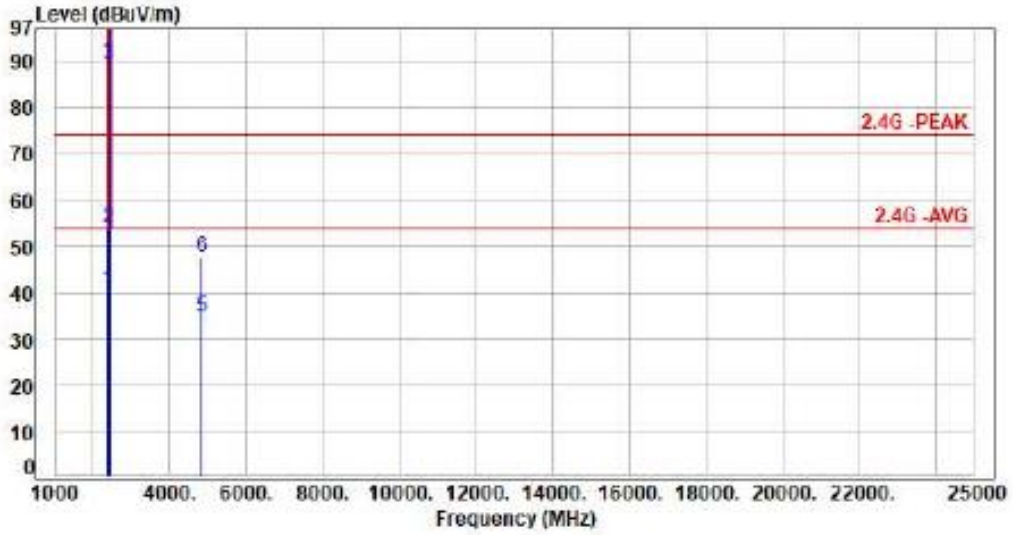
Test Mode : 2TX 11ax20 CH01 NSS1 MCS0
Voltage : From Adapter(AC120V/60Hz)
Pol : Vertical



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.33	54.56	52.23	54.00	-1.77	Average	130	180	P
2	2390.00	-2.33	62.72	60.39	74.00	-13.61	Peak	130	180	P
3	2412.00	-2.29	103.93	101.64	200.00	-98.36	Average	130	180	P
4	2412.00	-2.29	116.63	114.34	200.00	-85.66	Peak	130	180	P
5	4824.00	5.98	28.62	34.60	54.00	-19.40	Average	100	137	P
6	4824.00	5.98	42.17	48.15	74.00	-25.85	Peak	100	137	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

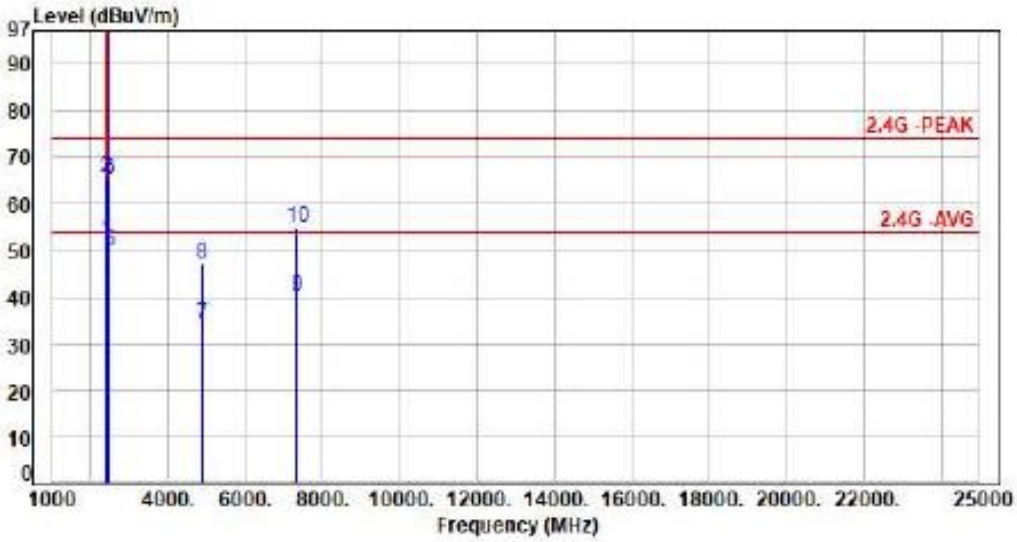
Test Mode : 2TX 11ax20 CH01 NSS1 MCS0
Voltage : From Adapter(AC120V/60Hz)
Pol : Horizontal



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.33	42.98	40.65	54.00	-13.35	Average	128	281	P
2	2390.00	-2.33	56.10	53.77	74.00	-20.23	Peak	128	281	P
3	2412.00	-2.29	91.67	89.38	200.00	-110.62	Average	128	281	P
4	2412.00	-2.29	104.85	102.56	200.00	-97.44	Peak	128	281	P
5	4824.00	5.98	28.70	34.68	54.00	-19.32	Average	100	174	P
6	4824.00	5.98	41.63	47.61	74.00	-26.39	Peak	100	174	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

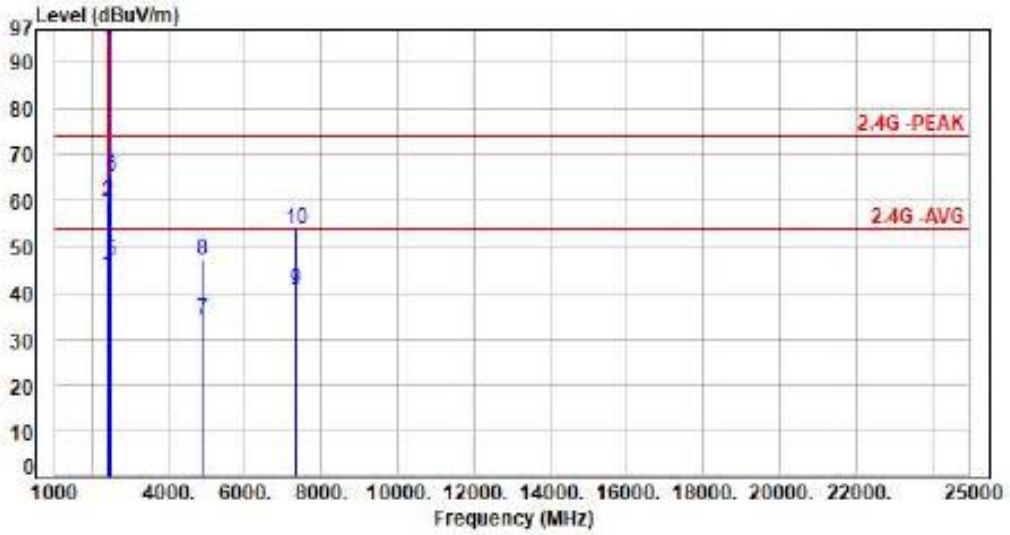
Test Mode : 2TX 11ax20 CH06 NSS1 MCS0
Voltage : From Adapter(AC120V/60Hz)
Pol : Vertical



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.33	54.86	52.53	54.00	-1.47	Average	100	177	P
2	2390.00	-2.33	67.84	65.51	74.00	-8.49	Peak	100	177	P
3	2437.00	-2.17	108.24	106.07	200.00	-93.93	Average	100	177	P
4	2437.00	-2.17	120.18	118.01	200.00	-81.99	Peak	100	177	P
5	2483.50	-2.01	51.86	49.85	54.00	-4.15	Average	100	177	P
6	2483.50	-2.01	67.22	65.21	74.00	-8.79	Peak	100	177	P
7	4874.00	6.13	28.34	34.47	54.00	-19.53	Average	100	132	P
8	4874.00	6.13	40.94	47.07	74.00	-26.93	Peak	100	132	P
9	7311.00	11.23	29.13	40.36	54.00	-13.64	Average	100	144	P
10	7311.00	11.23	43.60	54.83	74.00	-19.17	Peak	100	144	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

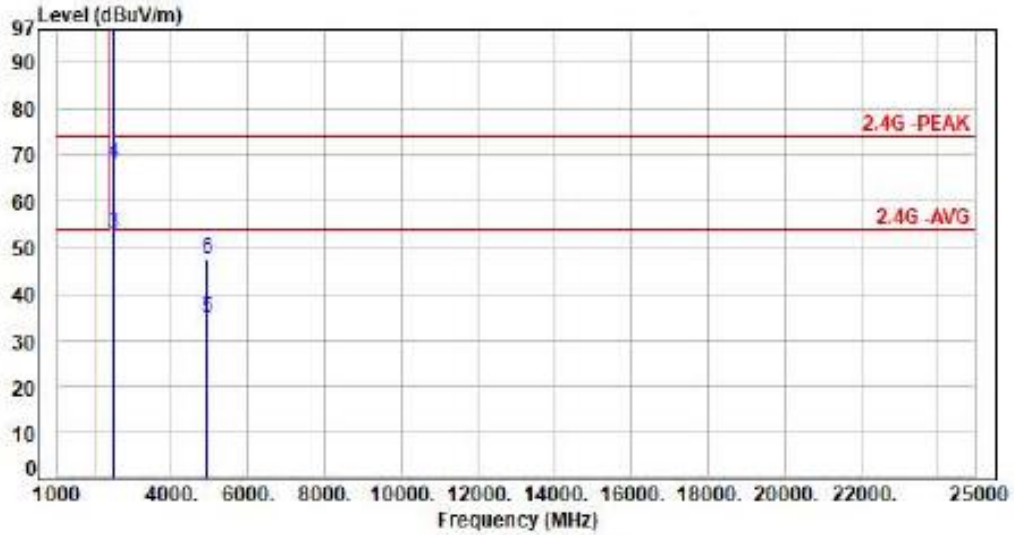
Test Mode : 2TX 11ax20 CH06 NSS1 MCS0
Voltage : From Adapter(AC120V/60Hz)
Pol : Horizontal



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.33	46.32	43.99	54.00	-10.01	Average	100	21	P
2	2390.00	-2.33	62.11	59.78	74.00	-14.22	Peak	100	21	P
3	2437.00	-2.17	97.42	95.25	200.00	-104.75	Average	100	21	P
4	2437.00	-2.17	110.27	108.10	200.00	-91.90	Peak	100	21	P
5	2483.50	-2.01	48.73	46.72	54.00	-7.28	Average	100	21	P
6	2483.50	-2.01	67.37	65.36	74.00	-8.64	Peak	100	21	P
7	4874.00	6.13	28.28	34.41	54.00	-19.59	Average	100	77	P
8	4874.00	6.13	41.19	47.32	74.00	-26.68	Peak	100	77	P
9	7311.00	11.23	29.31	40.54	54.00	-13.46	Average	100	157	P
10	7311.00	11.23	42.74	53.97	74.00	-20.03	Peak	100	157	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

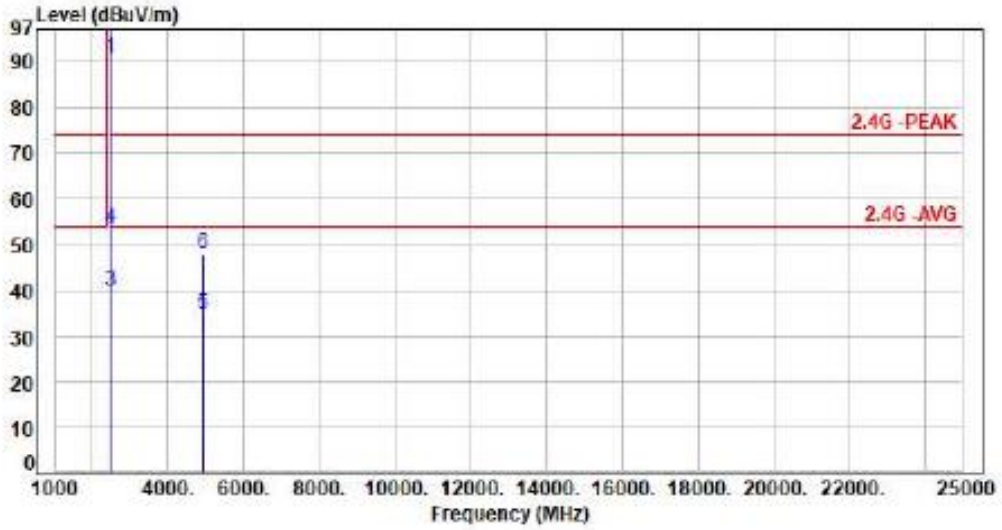
Test Mode : 2TX 11ax20 CH11 NSS1 MCS0
Voltage : From Adapter(AC120V/60Hz)
Pol : Vertical



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2462.00	-2.04	101.87	99.83	200.00	-100.17	Average	100	180	P
2	2462.00	-2.04	115.25	113.21	200.00	-86.79	Peak	100	180	P
3	2483.50	-2.01	55.00	52.99	54.00	-1.01	Average	100	180	P
4	2483.50	-2.01	70.14	68.13	74.00	-5.87	Peak	100	180	P
5	4924.00	6.29	28.26	34.55	54.00	-19.45	Average	100	148	P
6	4924.00	6.29	41.31	47.60	74.00	-26.40	Peak	100	148	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

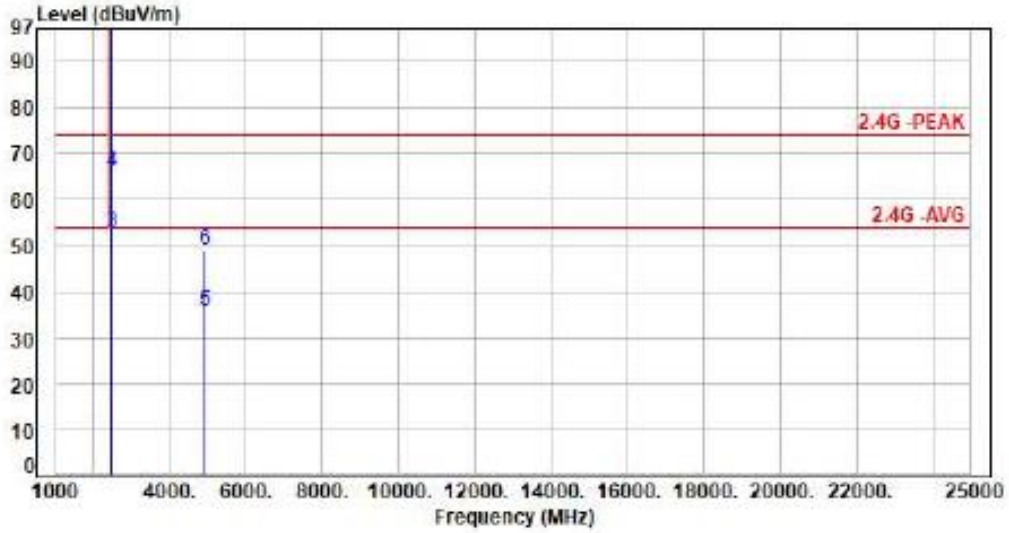
Test Mode : 2TX 11ax20 CH11 NSS1 MCS0
Voltage : From Adapter(AC120V/60Hz)
Pol : Horizontal



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2462.00	-2.04	92.92	90.88	200.00	-109.12	Average	100	130	P
2	2462.00	-2.04	105.78	103.74	200.00	-96.26	Peak	100	130	P
3	2483.50	-2.01	41.98	39.97	54.00	-14.03	Average	100	130	P
4	2483.50	-2.01	55.32	53.31	74.00	-20.69	Peak	100	130	P
5	4924.00	6.29	28.23	34.52	54.00	-19.48	Average	100	165	P
6	4924.00	6.29	41.50	47.79	74.00	-26.21	Peak	100	165	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

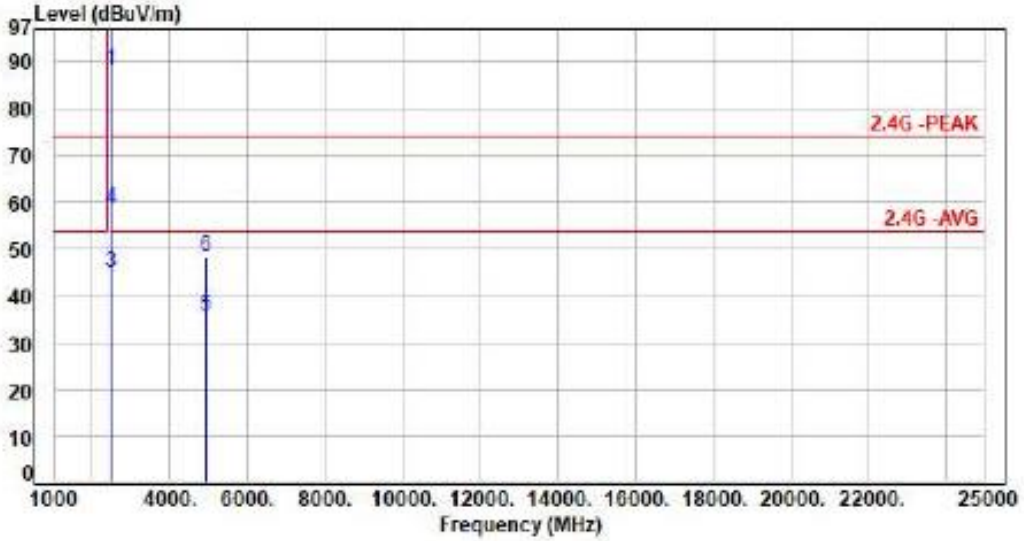
Test Mode : 2TX 11ax20 CH12 NSS1 MCS0
Voltage : From Adapter(AC120V/60Hz)
Pol : Vertical



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2467.00	-2.03	99.60	97.57	200.00	-102.43	Average	100	184	P
2	2467.00	-2.03	112.63	110.60	200.00	-89.40	Peak	100	184	P
3	2483.50	-2.01	54.80	52.79	54.00	-1.21	Average	100	184	P
4	2483.50	-2.01	68.13	66.12	74.00	-7.88	Peak	100	184	P
5	4934.00	6.32	29.47	35.79	54.00	-18.21	Average	100	161	P
6	4934.00	6.32	42.61	48.93	74.00	-25.07	Peak	100	161	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

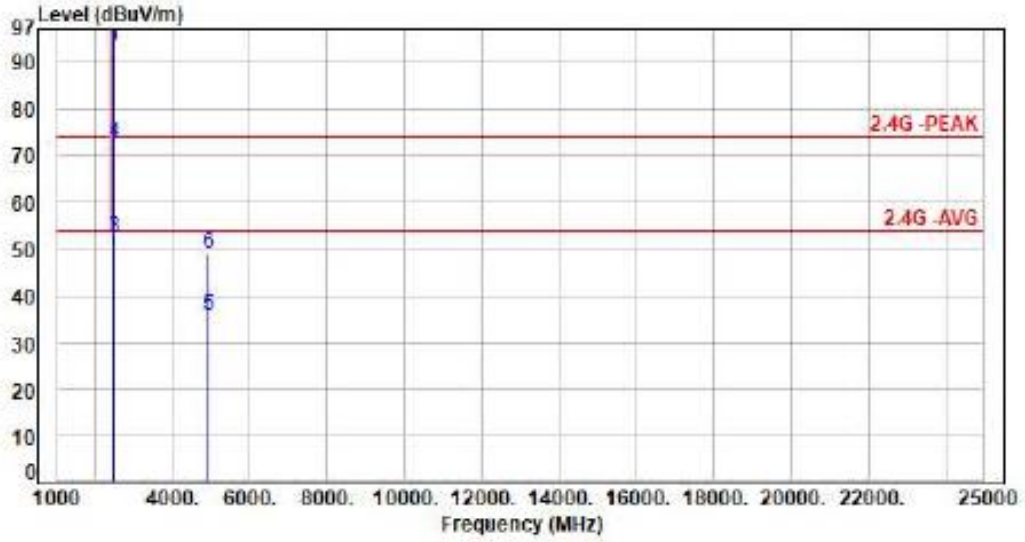
Test Mode : 2TX 11ax20 CH12 NSS1 MCS0
Voltage : From Adapter(AC120V/60Hz)
Pol : Horizontal



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2467.00	-2.03	90.01	87.98	200.00	-112.02	Average	100	134	P
2	2467.00	-2.03	102.14	100.11	200.00	-99.89	Peak	100	134	P
3	2483.50	-2.01	46.91	44.90	54.00	-9.10	Average	100	134	P
4	2483.50	-2.01	60.53	58.52	74.00	-15.48	Peak	100	134	P
5	4934.00	6.32	29.42	35.74	54.00	-18.26	Average	100	194	P
6	4934.00	6.32	42.16	48.48	74.00	-25.52	Peak	100	194	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

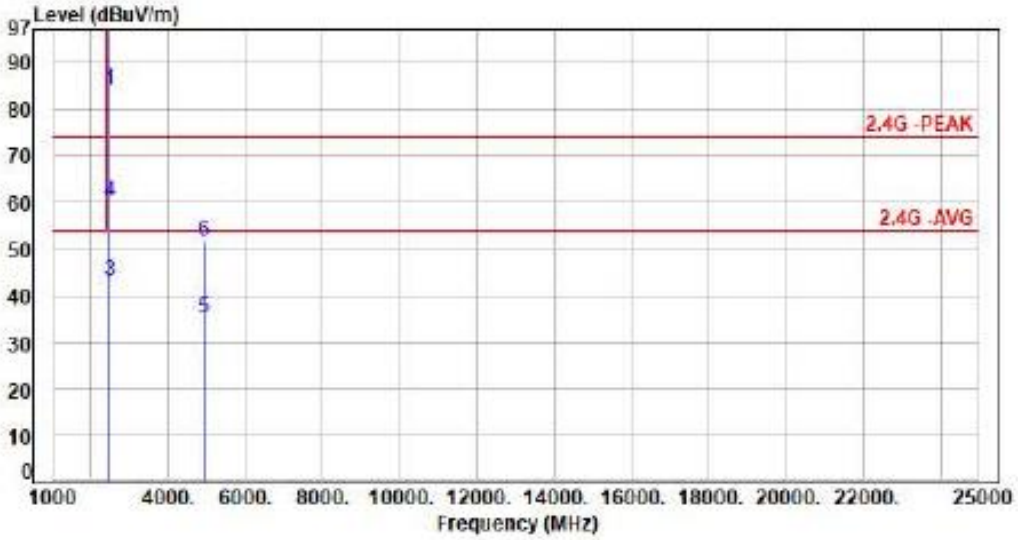
Test Mode : 2TX 11ax20 CH13 NSS1 MCS0
Voltage : From Adapter(AC120V/60Hz)
Pol : Vertical



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2472.00	-2.02	95.88	93.86	200.00	-106.14	Average	100	186	P
2	2472.00	-2.02	107.20	105.18	200.00	-94.82	Peak	100	186	P
3	2483.50	-2.01	54.51	52.50	54.00	-1.50	Average	100	186	P
4	2483.50	-2.01	74.79	72.78	74.00	-1.22	Peak	100	186	P
5	4944.00	6.35	29.41	35.76	54.00	-18.24	Average	100	195	P
6	4944.00	6.35	42.61	48.96	74.00	-25.04	Peak	100	195	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

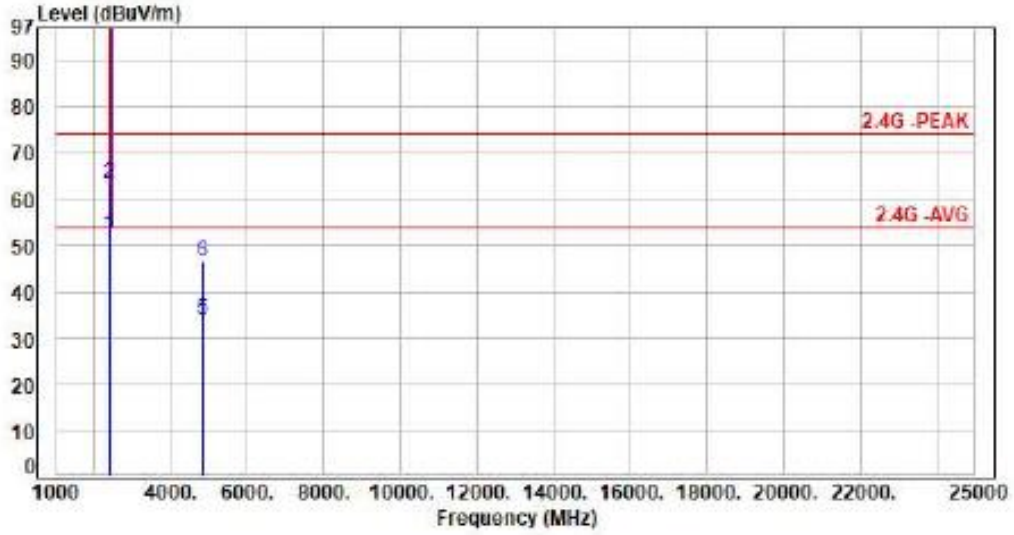
Test Mode : 2TX 11ax20 CH13 NSS1 MCS0
Voltage : From Adapter(AC120V/60Hz)
Pol : Horizontal



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2472.00	-2.02	85.96	83.94	200.00	-116.06	Average	100	133	P
2	2472.00	-2.02	98.12	96.10	200.00	-103.90	Peak	100	133	P
3	2483.50	-2.01	45.30	43.29	54.00	-10.71	Average	100	133	P
4	2483.50	-2.01	62.22	60.21	74.00	-13.79	Peak	100	133	P
5	4944.00	6.35	28.64	34.99	54.00	-19.01	Average	100	145	P
6	4944.00	6.35	45.15	51.50	74.00	-22.50	Peak	100	145	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

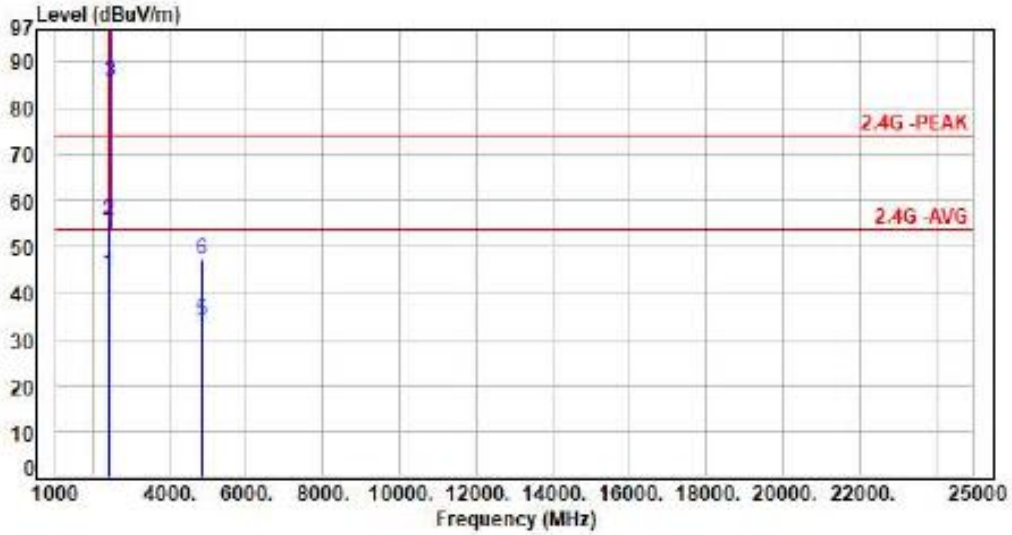
Test Mode : 2TX 11ax40 CH03 NSS1 MCS0
Voltage : From Adapter(AC120V/60Hz)
Pol : Vertical



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.33	54.78	52.45	54.00	-1.55	Average	120	180	P
2	2390.00	-2.33	65.87	63.54	74.00	-10.46	Peak	120	180	P
3	2422.00	-2.19	99.07	96.88	200.00	-103.12	Average	120	180	P
4	2422.00	-2.19	111.59	109.40	200.00	-90.60	Peak	120	180	P
5	4844.00	6.04	27.98	34.02	54.00	-19.98	Average	100	311	P
6	4844.00	6.04	40.51	46.55	74.00	-27.45	Peak	100	311	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

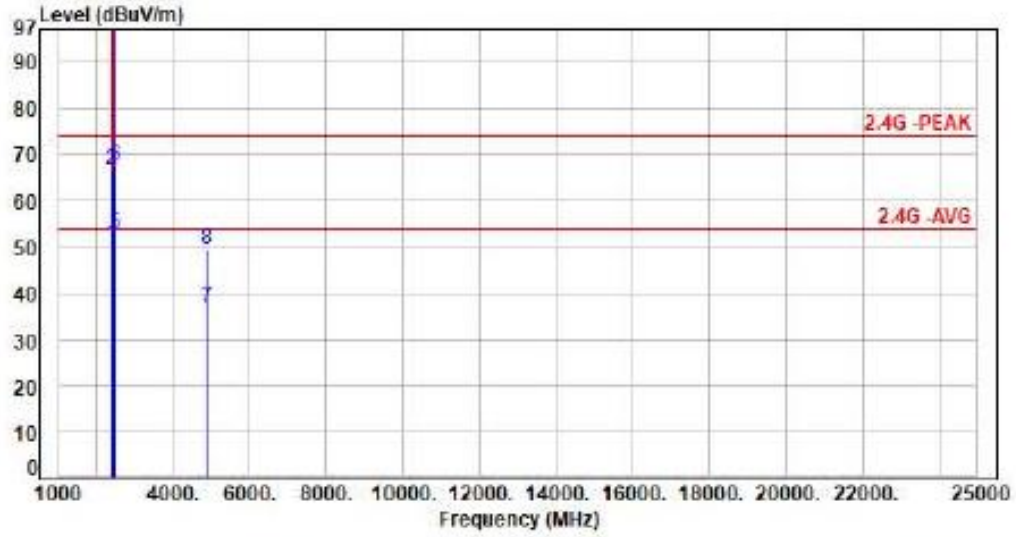
Test Mode : 2TX 11ax40 CH03 NSS1 MCS0
Voltage : From Adapter(AC120V/60Hz)
Pol : Horizontal



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.33	46.42	44.09	54.00	-9.91	Average	100	130	P
2	2390.00	-2.33	58.10	55.77	74.00	-18.23	Peak	100	130	P
3	2422.00	-2.19	87.64	85.45	200.00	-114.55	Average	100	130	P
4	2422.00	-2.19	100.16	97.97	200.00	-102.03	Peak	100	130	P
5	4844.00	6.04	27.80	33.84	54.00	-20.16	Average	100	125	P
6	4844.00	6.04	41.22	47.26	74.00	-26.74	Peak	100	125	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

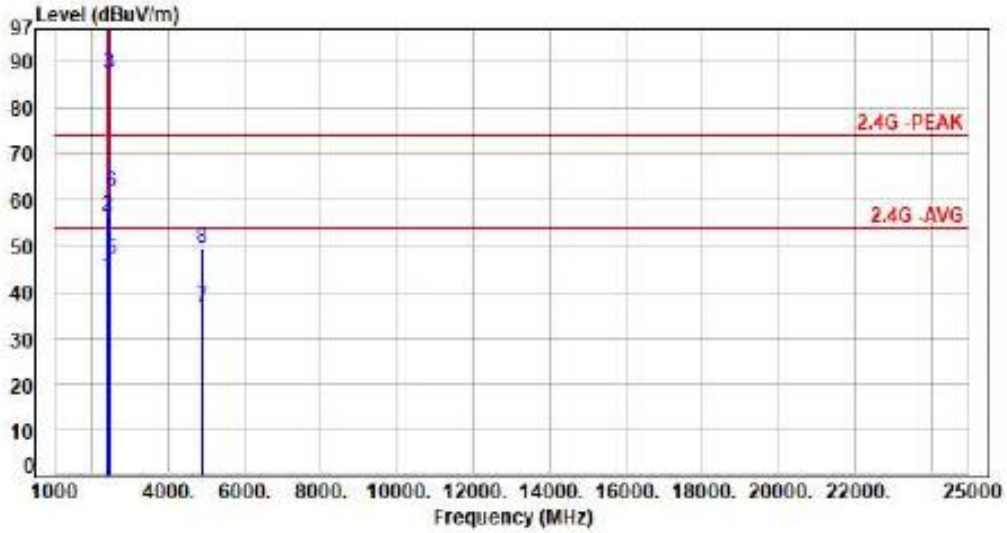
Test Mode : 2TX 11ax40 CH06 NSS1 MCS0
Voltage : From Adapter(AC120V/60Hz)
Pol : Vertical



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.33	52.84	50.51	54.00	-3.49	Average	120	184	P
2	2390.00	-2.33	68.93	66.60	74.00	-7.40	Peak	120	184	P
3	2437.00	-2.17	98.28	96.11	200.00	-103.89	Average	120	184	P
4	2437.00	-2.17	109.90	107.73	200.00	-92.27	Peak	120	184	P
5	2483.50	-2.01	54.77	52.76	54.00	-1.24	Average	120	184	P
6	2483.50	-2.01	69.62	67.61	74.00	-6.39	Peak	120	184	P
7	4874.00	6.13	30.65	36.78	54.00	-17.22	Average	100	215	P
8	4874.00	6.13	43.11	49.24	74.00	-24.76	Peak	100	215	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

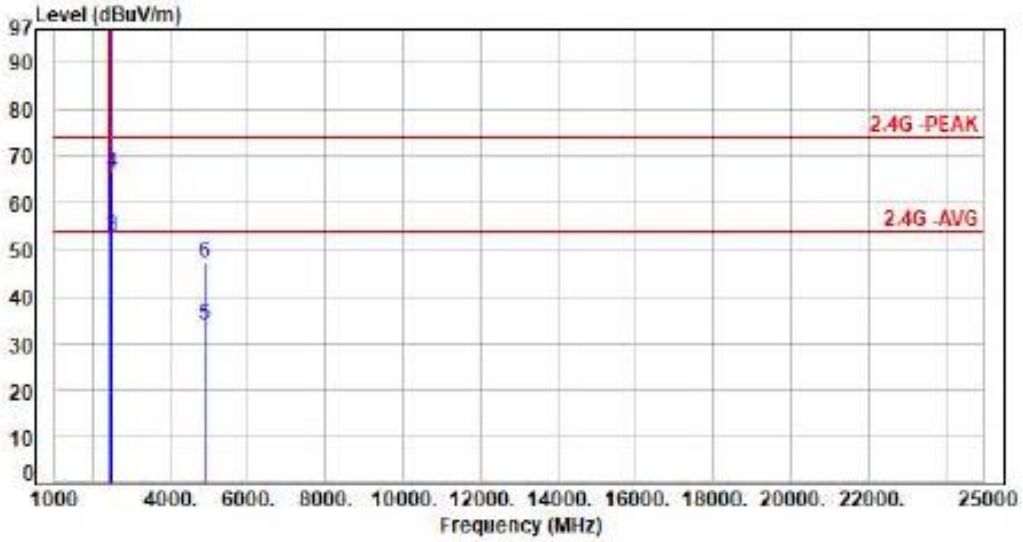
Test Mode : 2TX 11ax40 CH06 NSS1 MCS0
Voltage : From Adapter(AC120V/60Hz)
Pol : Horizontal



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.33	45.40	43.07	54.00	-10.93	Average	100	19	P
2	2390.00	-2.33	58.75	56.42	74.00	-17.58	Peak	100	19	P
3	2437.00	-2.17	89.42	87.25	200.00	-112.75	Average	100	19	P
4	2437.00	-2.17	103.19	101.02	200.00	-98.98	Peak	100	19	P
5	2483.50	-2.01	48.98	46.97	54.00	-7.03	Average	100	19	P
6	2483.50	-2.01	63.71	61.70	74.00	-12.30	Peak	100	19	P
7	4874.00	6.13	30.23	36.36	54.00	-17.64	Average	100	38	P
8	4874.00	6.13	43.31	49.44	74.00	-24.56	Peak	100	38	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

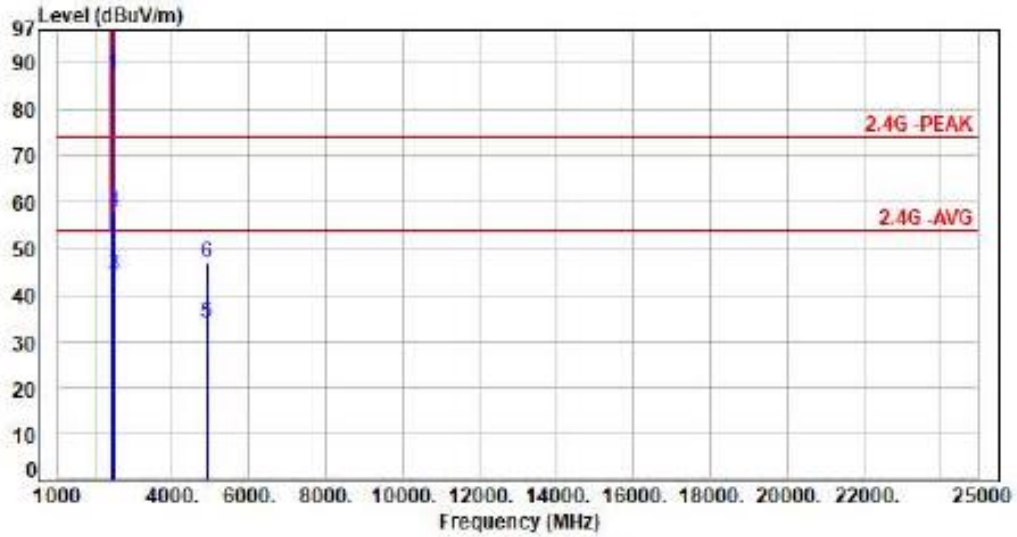
Test Mode : 2TX 11ax40 CH09 NSS1 MCS0
Voltage : From Adapter(AC120V/60Hz)
Pol : Vertical



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2452.00	-2.13	99.42	97.29	200.00	-102.71	Average	100	180	P
2	2452.00	-2.13	111.15	109.02	200.00	-90.98	Peak	100	180	P
3	2483.50	-2.01	54.76	52.75	54.00	-1.25	Average	100	180	P
4	2483.50	-2.01	68.46	66.45	74.00	-7.55	Peak	100	180	P
5	4904.00	6.23	27.83	34.06	54.00	-19.94	Average	100	149	P
6	4904.00	6.23	41.11	47.34	74.00	-26.66	Peak	100	149	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

Test Mode : 2TX 11ax40 CH09 NSS1 MCS0
Voltage : From Adapter(AC120V/60Hz)
Pol : Horizontal



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2452.00	-2.13	89.44	87.31	200.00	-112.69	Average	100	274	P
2	2452.00	-2.13	101.20	99.07	200.00	-100.93	Peak	100	274	P
3	2483.50	-2.01	46.37	44.36	54.00	-9.64	Average	100	274	P
4	2483.50	-2.01	59.90	57.89	74.00	-16.11	Peak	100	274	P
5	4904.00	6.23	27.73	33.96	54.00	-20.04	Average	100	261	P
6	4904.00	6.23	40.79	47.02	74.00	-26.98	Peak	100	261	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

6.7 Restricted Bands of Operation

Only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.09000 – 0.11000	16.42000 – 16.42300	399.9 – 410.0	4.500 – 5.250
0.49500 – 0.505**	16.69475 – 16.69525	608.0 – 614.0	5.350 – 5.460
2.17350 – 2.19050	16.80425 – 16.80475	960.0 – 1240.0	7.250 – 7.750
4.12500 – 4.12800	25.50000 – 25.67000	1300.0 – 1427.0	8.025 – 8.500
4.17725 – 4.17775	37.50000 – 38.25000	1435.0 – 1626.5	9.000 – 9.200
4.20725 – 4.20775	73.00000 – 74.60000	1645.5 – 1646.5	9.300 – 9.500
6.21500 – 6.21800	74.80000 – 75.20000	1660.0 – 1710.0	10.600 – 12.700
6.26775 – 6.26825	108.00000 – 121.94000	1718.8 – 1722.2	13.250 – 13.400
6.31175 – 6.31225	123.00000 – 138.00000	2200.0 – 2300.0	14.470 – 14.500
8.29100 – 8.29400	149.90000 – 150.05000	2310.0 – 2390.0	15.350 – 16.200
8.36200 – 8.36600	156.52475 – 156.52525	2483.5 – 2500.0	17.700 – 21.400
8.37625 – 8.38675	156.70000 – 156.90000	2655.0 – 2900.0	22.010 – 23.120
8.41425 – 8.41475	162.01250 – 167.17000	3260.0 – 3267.0	23.600 – 24.000
12.29000 – 12.29300	167.72000 – 173.20000	3332.0 – 3339.0	31.200 – 31.800
12.51975 – 12.52025	240.00000 – 285.00000	3345.8 – 3358.0	36.430 – 36.500
12.57675 – 12.57725	322.00000 – 335.40000	3600.0 – 4400.0	Above 38.6
13.36000 – 13.41000			

**: Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz

7. Test of Conducted Spurious Emission

7.1 Test Limit

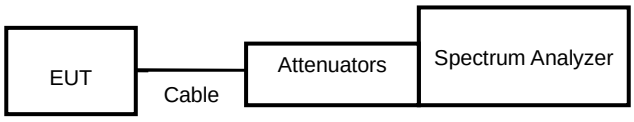
According to the methods defined in ANSI C63.10-2013 Section 11.11.1
Below –30dB of the highest emission level of operating band (In 100 kHz Resolution Bandwidth)

7.2 Test Procedure

According to the methods defined in ANSI C63.10-2013 Section 11.11.2 & 11.11.3

a. The transmitter output was connected to the spectrum analyzer via a low loss cable.
b. Set RBW of spectrum analyzer to 100 KHz and VBW of spectrum analyzer to 300 KHz with convenient frequency span including 100 KHz bandwidth from band edge.
c. Peak conducted output power measured within any 100 kHz outside the authorized frequency band shall be attenuated by at least 30dB relative to the maximum measured in-band peak PSD level.
d. The band edges was measured and recorded.

7.3 Test Setup Layout

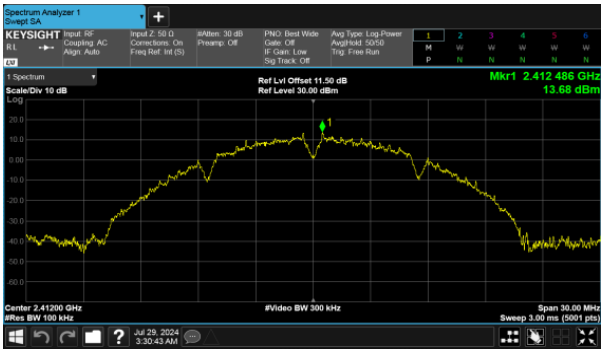


7.4 Test Result and Data

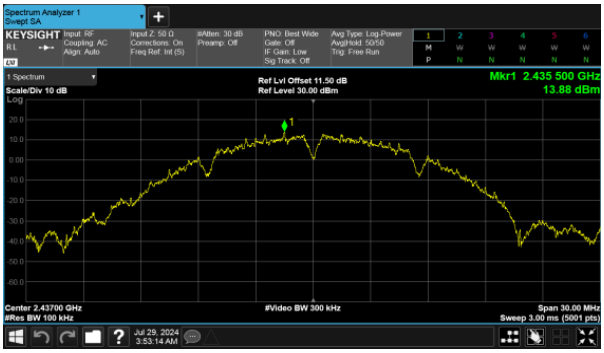
Note: Test plots refers to the following pages.

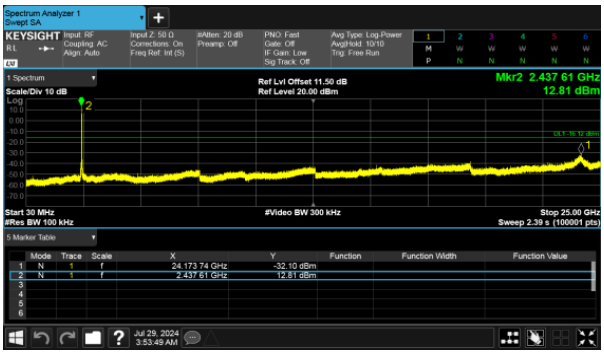
SISO ANT B

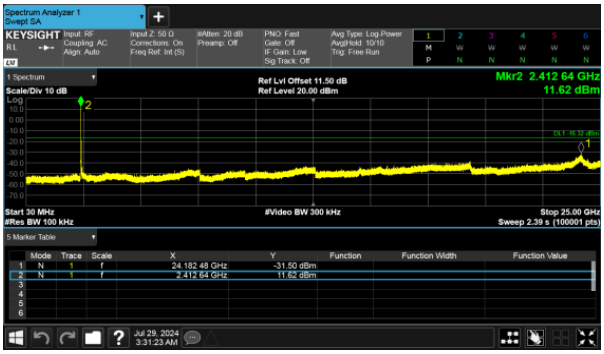
Modulation Type: 802.11b, CH 01



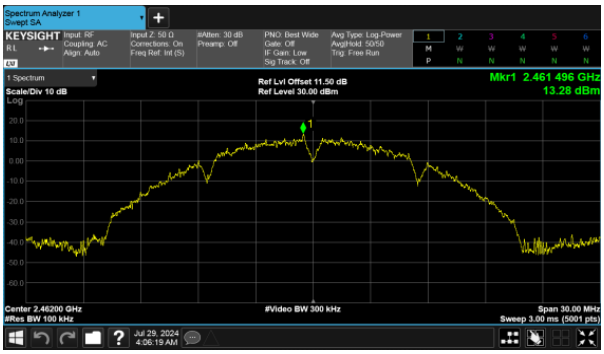
Modulation Type: 802.11b, CH 06

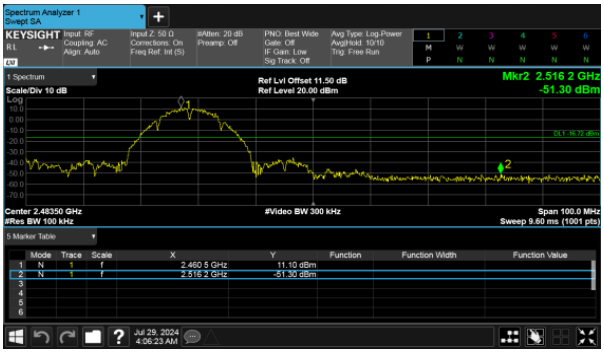






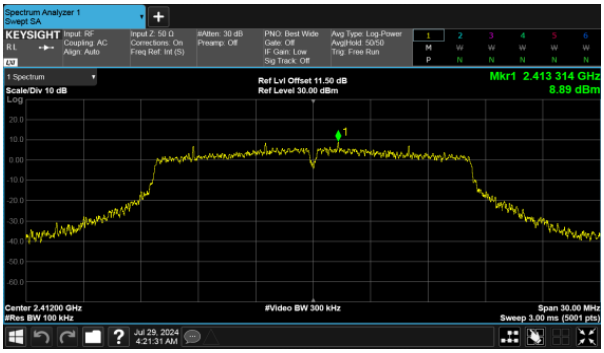
Modulation Type: 802.11b, CH 11



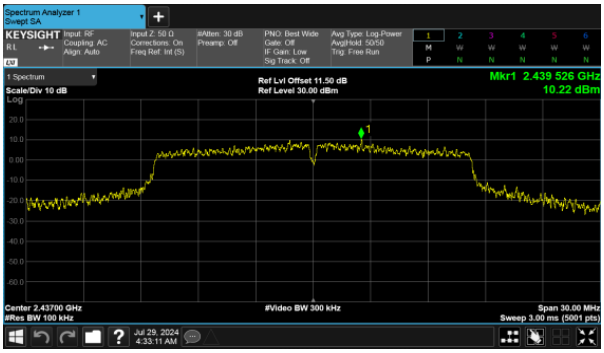


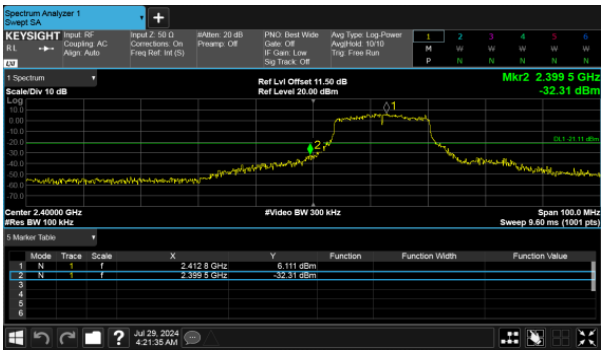
SISO ANT B

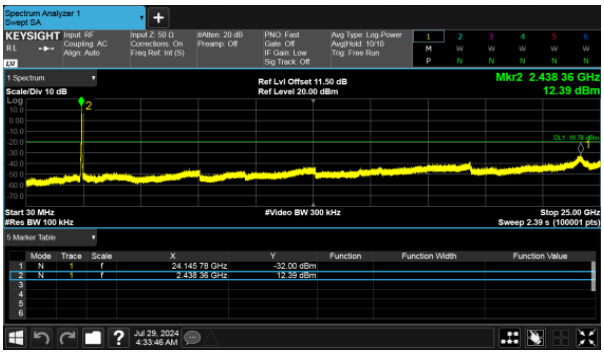
Modulation Type: 802.11g, CH 01



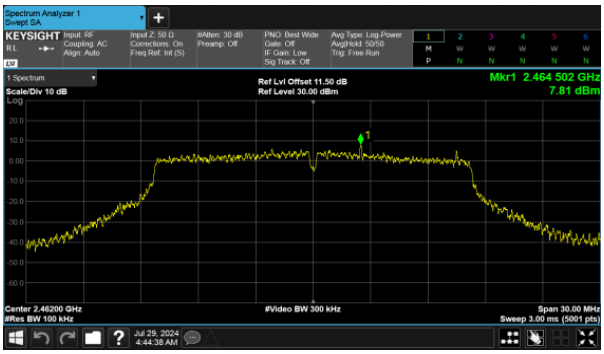
Modulation Type: 802.11g, CH 06



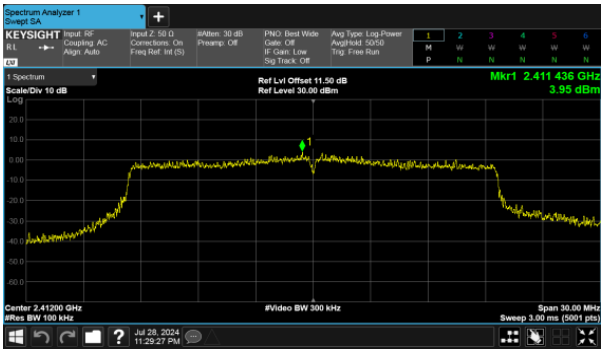




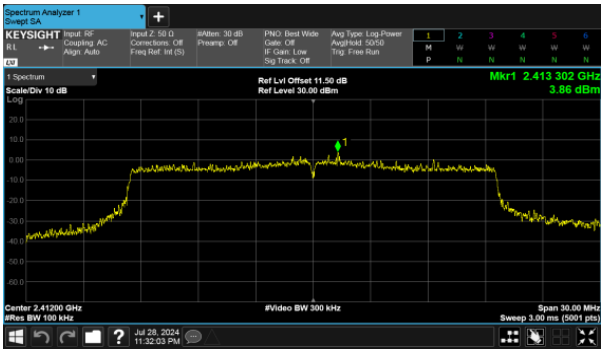
Modulation Type: 802.11g, CH 11

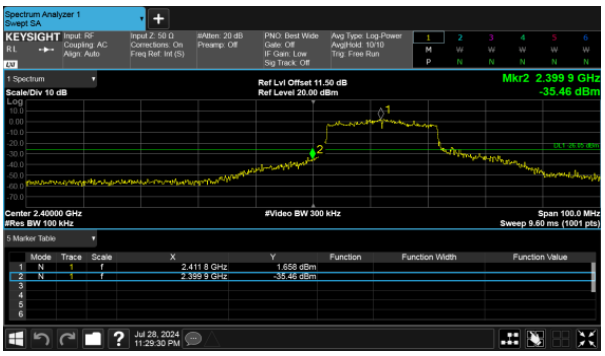


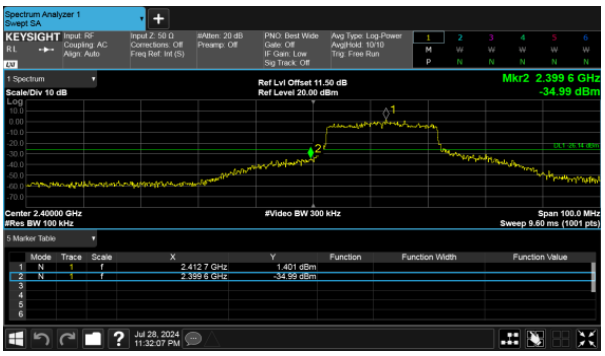
MIMO
ANT A
Modulation Type: 802.11ax20, CH01



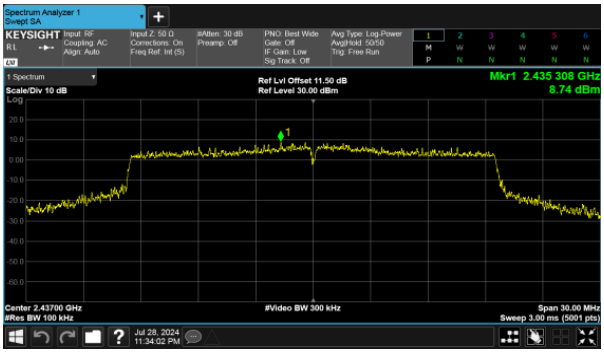
ANT B
Modulation Type: 802.11ax20, CH01



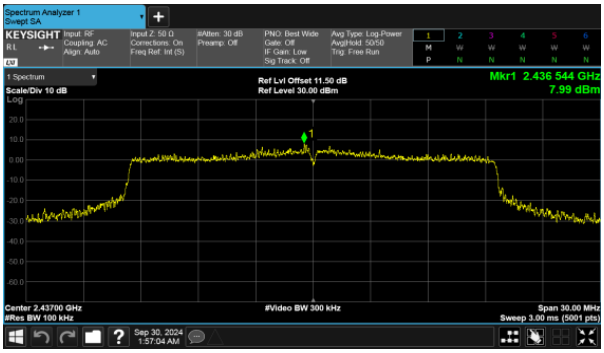




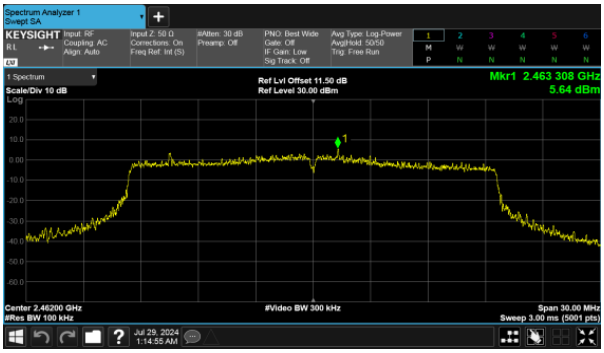
ANT A
Modulation Type: 802.11ax20, CH06



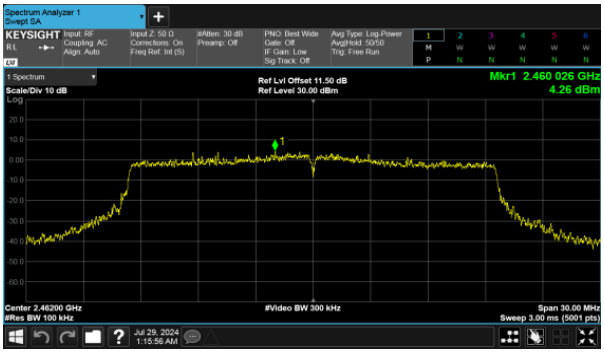
ANT B
Modulation Type: 802.11ax20, CH06

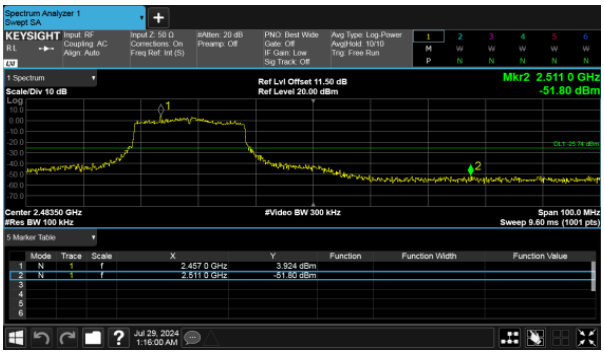


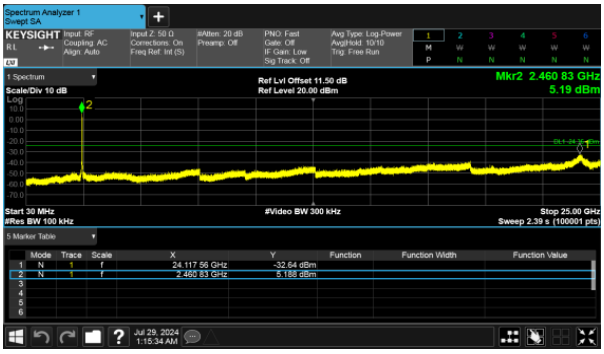
ANT A
Modulation Type: 802.11ax20, CH11

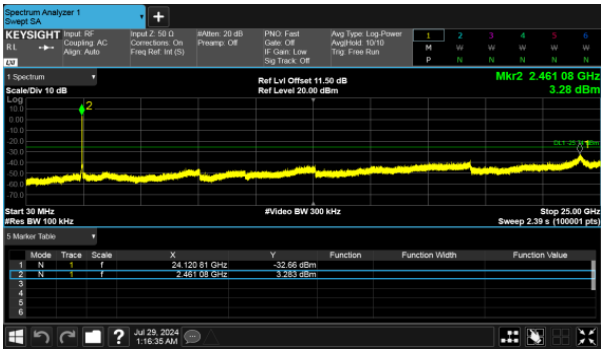


ANT B
Modulation Type: 802.11ax20, CH11

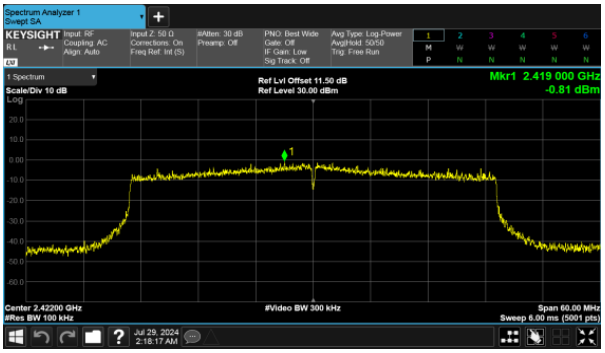




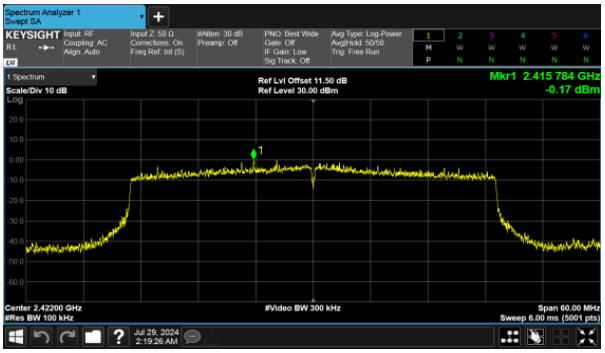




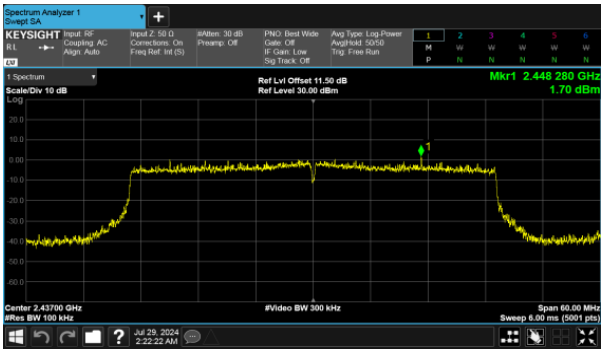
MIMO
ANT A
Modulation Type: 802.11ax40, CH03



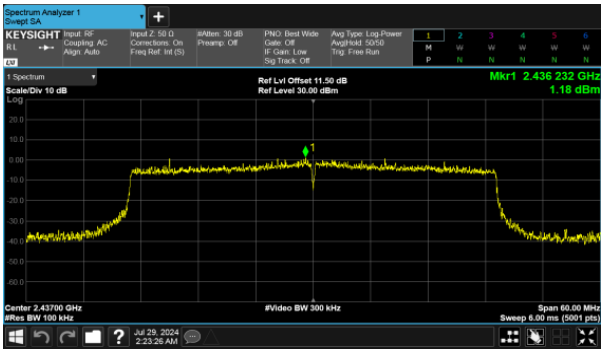
MIMO
ANT B
Modulation Type: 802.11ax40, CH03



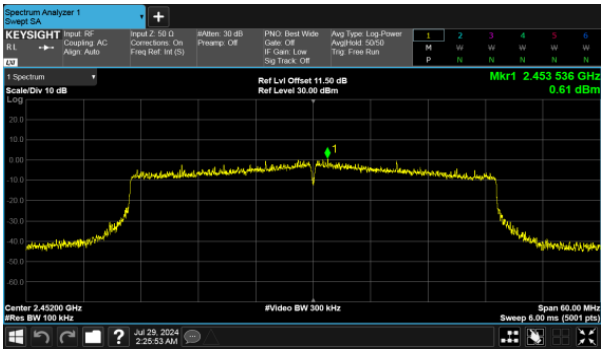
MIMO
ANT A
Modulation Type: 802.11ax40, CH06



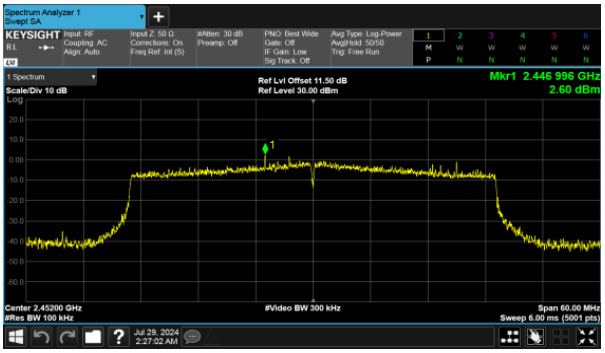
MIMO
ANT B
Modulation Type: 802.11ax40, CH06

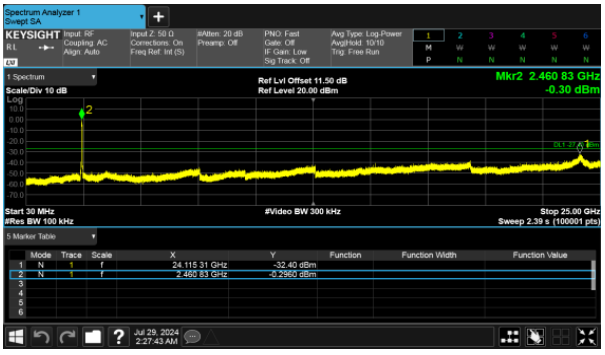


MIMO
ANT A
Modulation Type: 802.11ax40, CH09



MIMO
ANT B
Modulation Type: 802.11ax40, CH09





8. On Time, Duty Cycle and Measurement methods

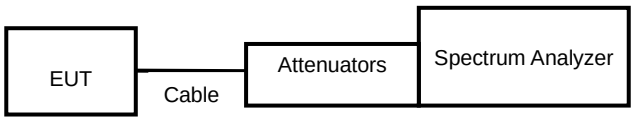
8.1 Test Limit

None; for reporting purposes only.

8.2 Test Procedure

According to the methods defined in ANSI C63.10-2013 Section 11.6 Zero-Span Spectrum Analyzer Method.

8.3 Test Setup Layout



8.4 Test Result and Data

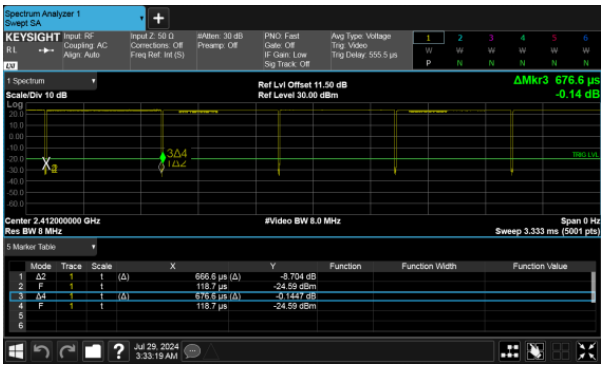
SISO

Modulation Type	On Time (ms)	Period Time (ms)	Duty Cycle (%)
11b,1M	0.667	0.677	98.52%
11g,6M	2.102	2.112	99.53%

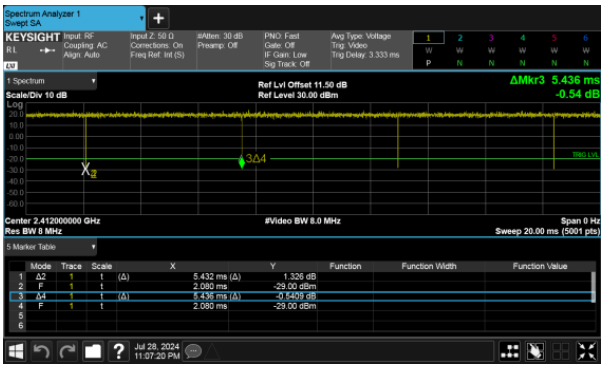
MIMO

Modulation Type	On Time (ms)	Period Time (ms)	Duty Cycle (%)
11ax HE20	5.43	5.44	99.93%
11ax HE40	4.12	4.12	99.90%

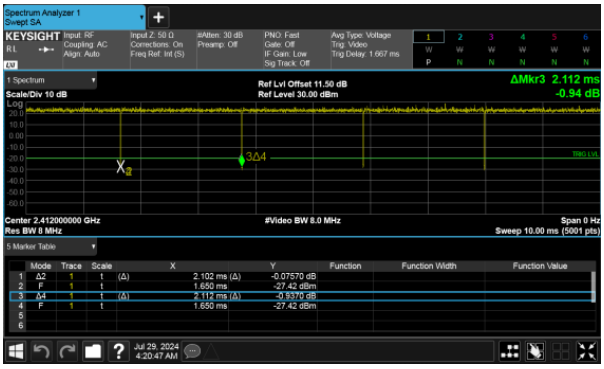
SISO
Modulation Type: 802.11b



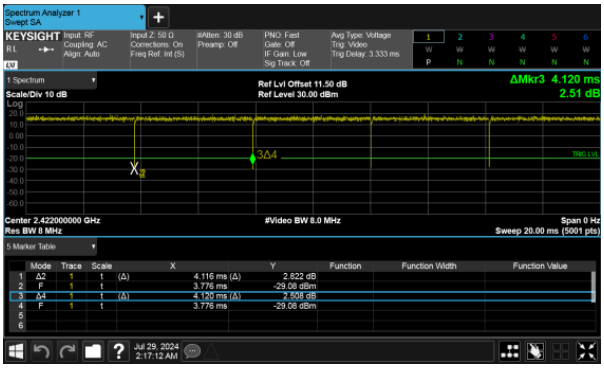
MIMO
Modulation Type: 802.11ax20



Modulation Type: 802.11g



Modulation Type: 802.11ax40



9. 6dB Bandwidth Measurement Data

9.1 Test Limit

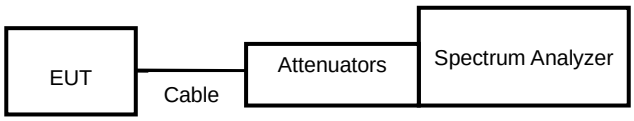
The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

9.2 Test Procedures

According to the methods defined in ANSI C63.10-2013 Section 11.8

a. The transmitter output was connected to the spectrum analyzer.
b. Set RBW of spectrum analyzer to 100 KHz and VBW to 300 KHz.
c. The 6 dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6 dB.
d. The 6dB Bandwidth was measured and recorded.

9.3 Test Setup Layout



9.4 Test Result and Data

SISO

Modulation Type	Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)
			ANT B	
11b	1	2412	7.14	0.5
	6	2437	8.05	0.5
	11	2462	7.62	0.5
11g	1	2412	15.15	0.5
	6	2437	15.14	0.5
	11	2462	15.15	0.5

MIMO

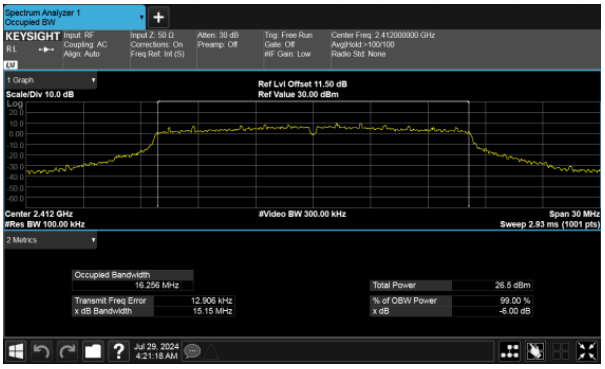
Modulation Type	Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Limit (MHz)
			ANT A	ANT B	
11ax HE20	1	2412	18.55	18.25	0.5
	6	2437	18.52	17.63	0.5
	11	2462	17.16	17.37	0.5
11ax HE40	3	2422	35.04	35.32	0.5
	6	2437	37.64	37.40	0.5
	9	2452	31.33	33.75	0.5

6dB Bandwidth
SISO ANT B
Modulation Type: 802.11b
CH01

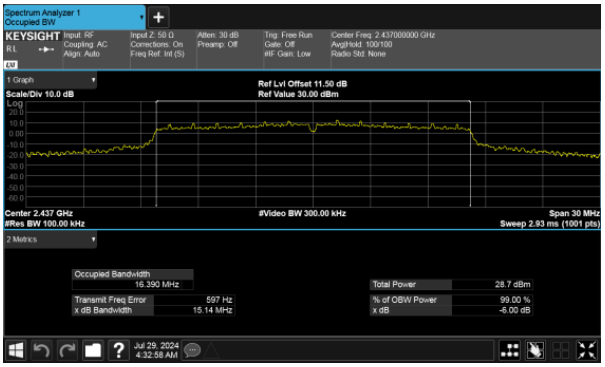
CH06

CH11

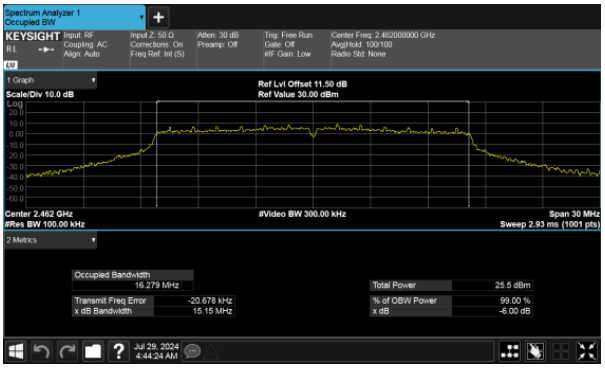
SISO ANT B
Modulation Type: 802.11g
CH01



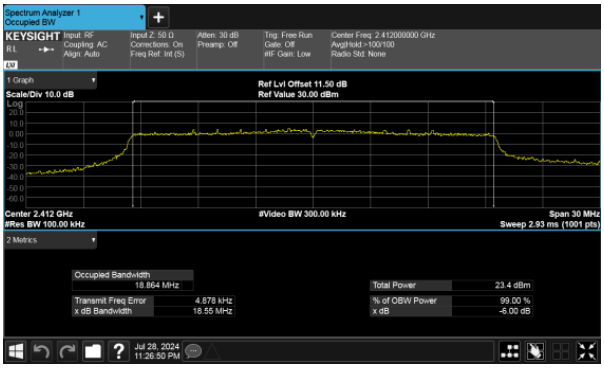
CH06



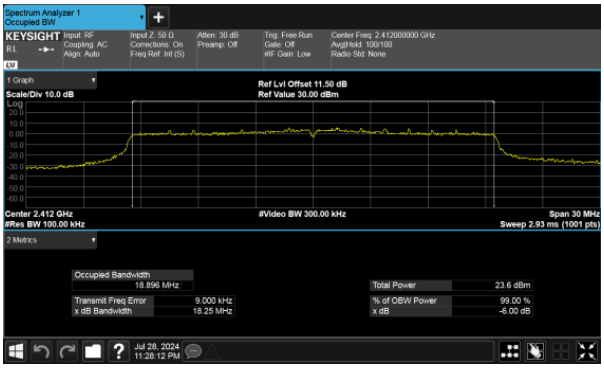
CH11



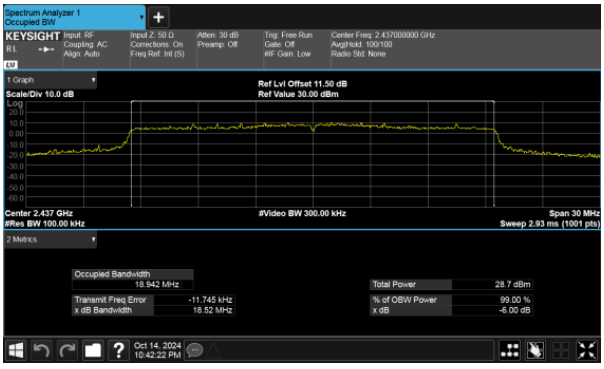
MIMO
ANT A
Modulation Type: 802.11ax20
CH01



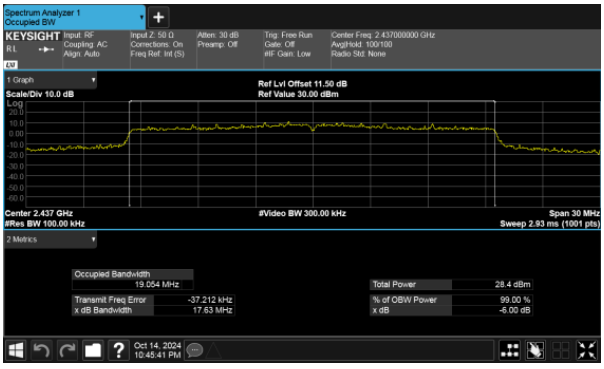
ANT B
Modulation Type: 802.11ax20
CH01



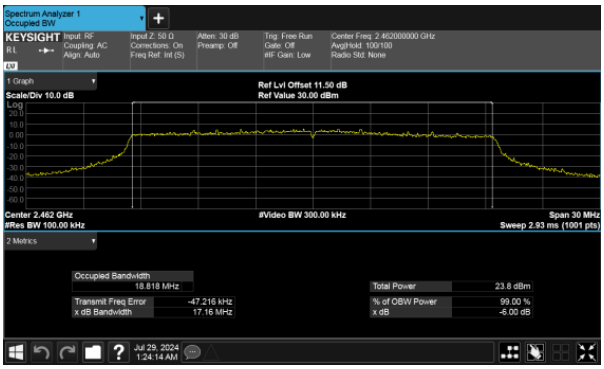
CH06



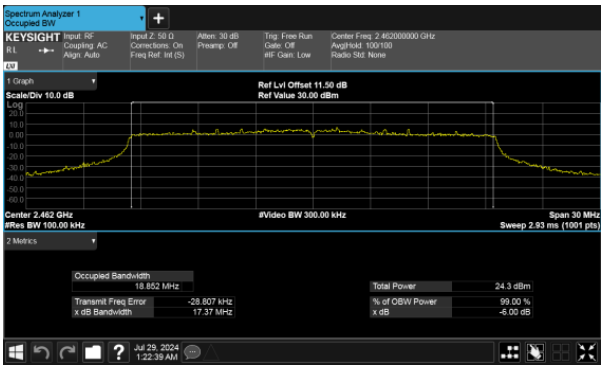
CH06



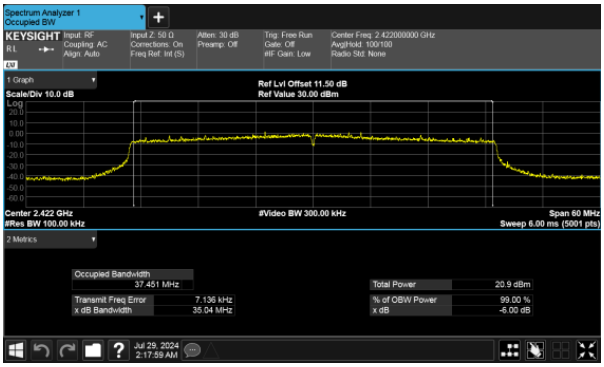
CH11



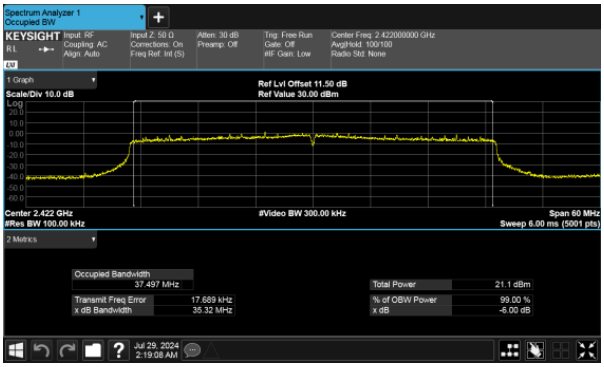
CH11



MIMO
ANT A
Modulation Type: 802.11ax40
CH03



ANT B
Modulation Type: 802.11ax40
CH03



CH06

CH06

CH09

CH09

10. Maximum Average Output Power

10.1 Test Limit

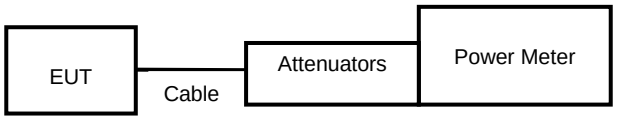
The Maximum Average Output Power Measurement is 30dBm.
If transmitting antennas of directional gain greater than 6 dBi are used, the average output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi

10.2 Test Procedures

According to the methods defined in ANSI C63.10-2013 Section 11.9.2.3.2

The antenna port (RF output) of the EUT was connected to the input (RF input) of a power meter. Power was read directly from the meter and cable loss connection was added to the reading to obtain power at the EUT antenna terminal. The EUT Output Power was set to maximum to produce the worse case test result.

10.3 Test Setup Layout



10.4 Test Result and Data

ANT A

Data Rate	Setting	Modulation Mode	Channel	Frequency (MHz)	Conducted(average) output power (dBm)	Total AV power (dBm)	Total AV power (mW)	Powe Limit (dBm)
					ANT A			
1	21	11b	1	2412	21.04	21.04	127.057	30.00
	22		6	2437	22.12	22.12	162.930	30.00
	21		11	2462	21.22	21.22	132.434	30.00
6	18.5	11g	1	2412	19.18	19.18	82.794	30.00
	21		6	2437	21.51	21.51	141.579	30.00
	17.5		11	2462	18.22	18.22	66.374	30.00

ANT B

Data Rate	Setting	Modulation Mode	Channel	Frequency (MHz)	Conducted(average) output power (dBm)	Total AV power (dBm)	Total AV power (mW)	Powe Limit (dBm)
					ANT B			
1	21	11b	1	2412	21.88	21.88	154.170	30.00
	22		6	2437	22.91	22.91	195.434	30.00
	21		11	2462	21.59	21.59	144.212	30.00
6	18.5	11g	1	2412	19.36	19.36	86.298	30.00
	21		6	2437	21.53	21.53	142.233	30.00
	17.5		11	2462	18.60	18.60	72.444	30.00

ANT A, B

Data Rate	Setting	Modulation Mode	Channel	Frequency (MHz)	Conducted(average) output power (dBm)		Total AV power (dBm)	Total AV power (mW)	Powe Limit (dBm)
					ANT A	ANT B			
NSS1-MCS0	15	11ax HE20	1	2412	15.57	15.81	18.70	74.164	30.00
	21		6	2437	21.02	21.15	24.10	256.790	30.00
	15.5		11	2462	16.11	16.78	19.47	88.475	30.00
NSS1-MCS0	13.5	11ax HE40	3	2422	13.82	14.04	16.94	49.450	30.00
	16		6	2437	16.11	16.31	19.22	83.588	30.00
	14.5		9	2452	14.31	14.94	17.65	58.166	30.00

11. Power Spectral Density

11.1 Test Limit

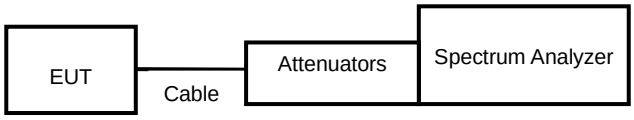
The Maximum of Power Spectral Density Measurement is 8dBm.

If transmitting antennas of directional gain greater than 6 dBi are used, the power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi

11.2 Test Procedures

According to the methods defined in ANSI C63.10-2013 Section 11.10

11.3 Test Setup Layout



11.4 Test Result and Data

SISO

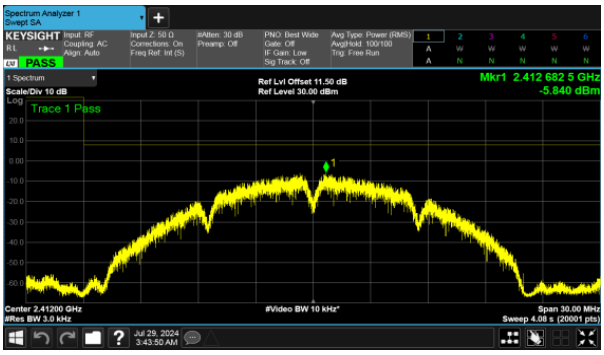
Modulation Type	Channel	Frequency (MHz)	Maximum Power Density of 3KHz Bandwidth(dBm)	Sum chain (dBm)	Duty Cycle CF(dB)	Total PSD (dBm)	Limit (dBm)
			ANT B				
11b	1	2412	-5.84	-5.84	0.00	-5.84	8.00
	6	2437	-4.881	-4.88	0.00	-4.88	8.00
	11	2462	-6.356	-6.36	0.00	-6.36	8.00
11g	1	2412	-11.75	-11.75	0.00	-11.75	8.00
	6	2437	-9.651	-9.65	0.00	-9.65	8.00
	11	2462	-12.606	-12.61	0.00	-12.61	8.00

MIMO

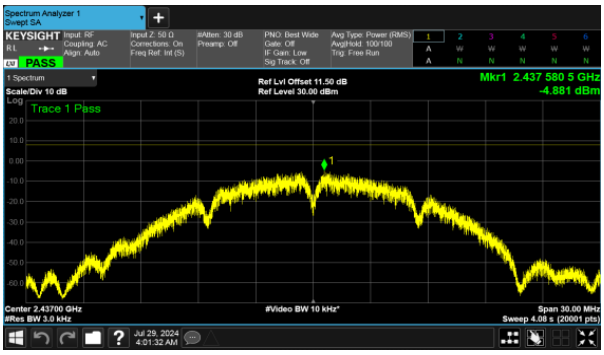
Modulation Type	Channel	Frequency (MHz)	Maximum Power Density of 3KHz Bandwidth(dBm)		Sum chain (dBm)	Duty Cycle CF(dB)	Total PSD (dBm)	Limit (dBm)
			ANT A	ANT B				
11ax HE20	1	2412	-18.267	-17.776	-15.00	0.00	-15.00	8.00
	6	2437	-12.699	-12.85	-9.76	0.00	-9.76	8.00
	11	2462	-17.972	-17.422	-14.68	0.00	-14.68	8.00

Modulation Type	Channel	Frequency (MHz)	Maximum Power Density of 100KHz Bandwidth(dBm)		Sum chain (dBm)	Duty Cycle CF(dB)	Total PSD (dBm)	Limit (dBm)
			ANT A	ANT B				
11ax HE40	3	2422	-8.419	-8.35	-5.37	0.00	-5.37	8.00
	6	2437	-7.05	-6.767	-3.90	0.00	-3.90	8.00
	9	2452	-7.297	-7.124	-4.20	0.00	-4.20	8.00

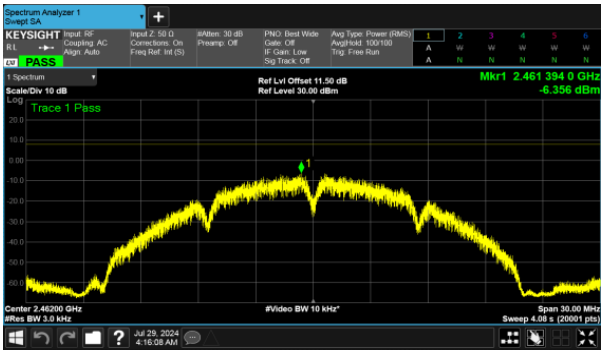
SISO
Modulation Type: 802.11b
CH01



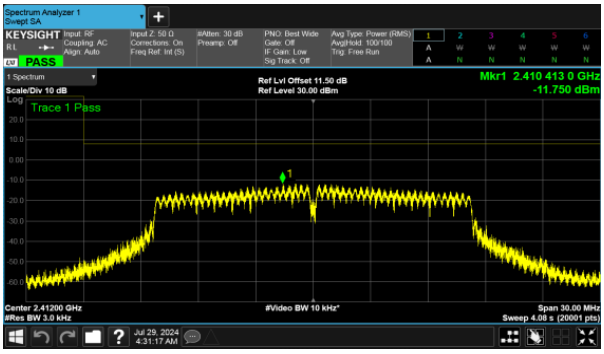
CH06



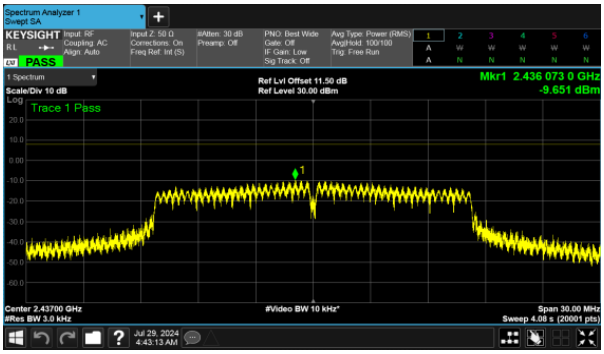
CH11



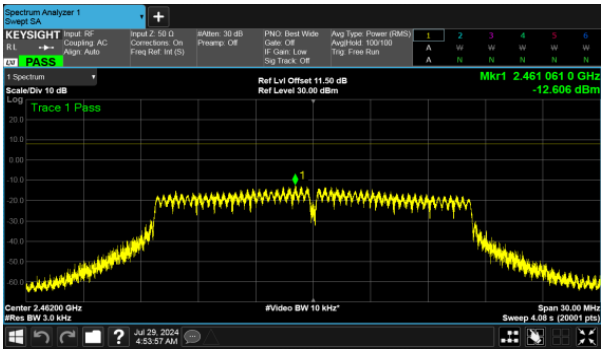
SISO
Modulation Type: 802.11g
CH01



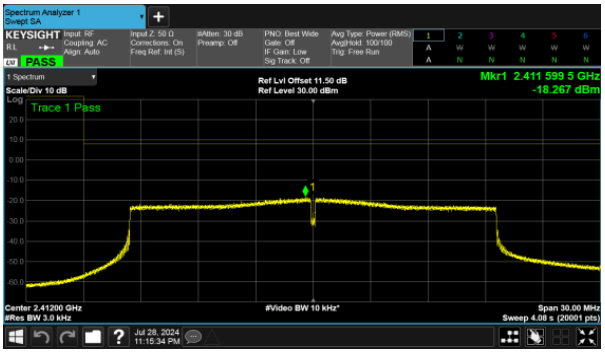
CH06



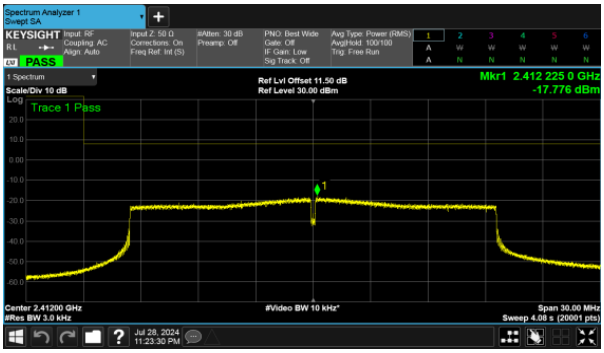
CH11



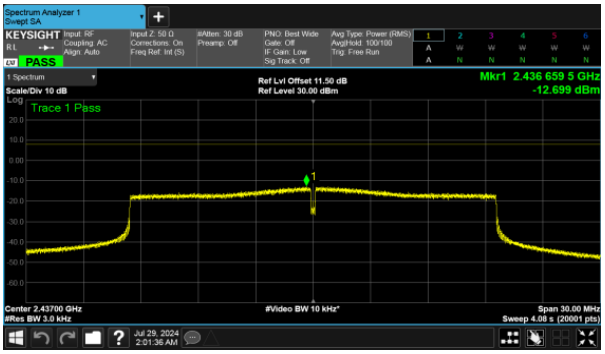
MIMO
ANT A
Modulation Type: 802.11ax20
CH01



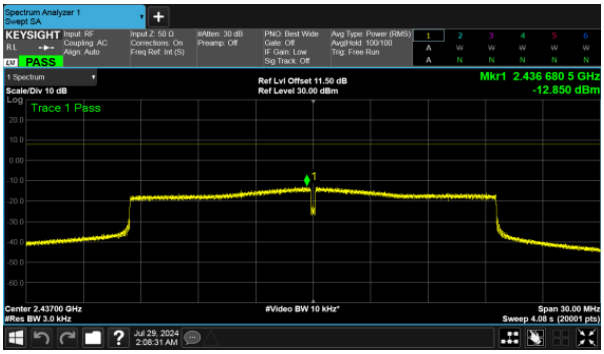
ANT B
Modulation Type: 802.11ax20
CH01



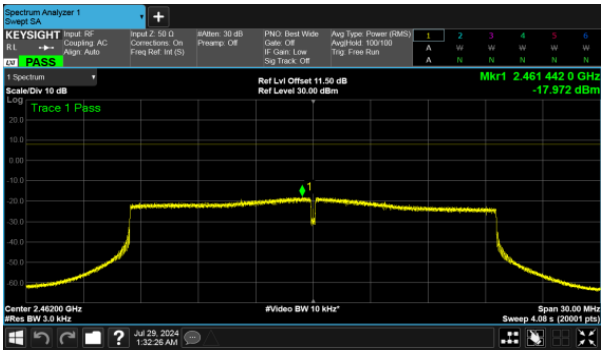
CH06



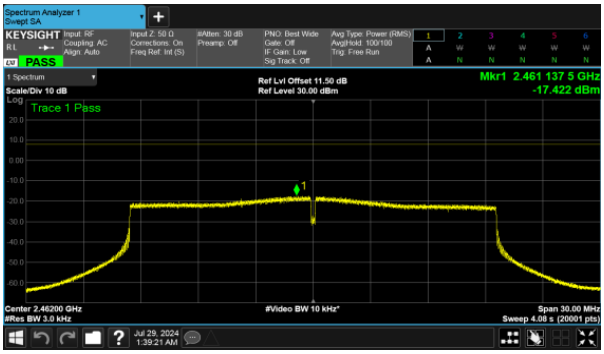
CH06



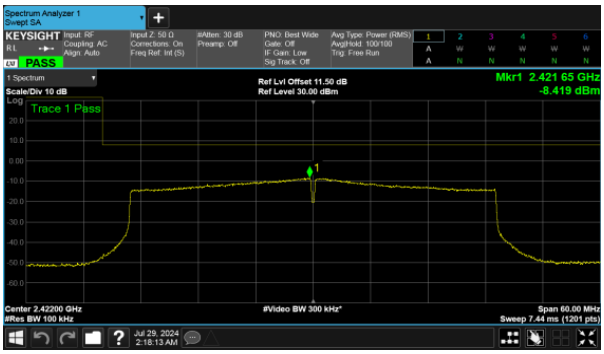
CH11



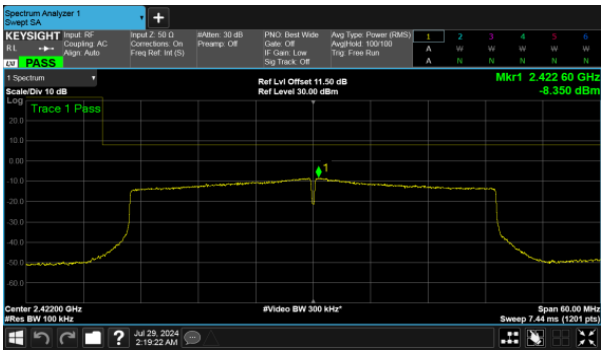
CH11



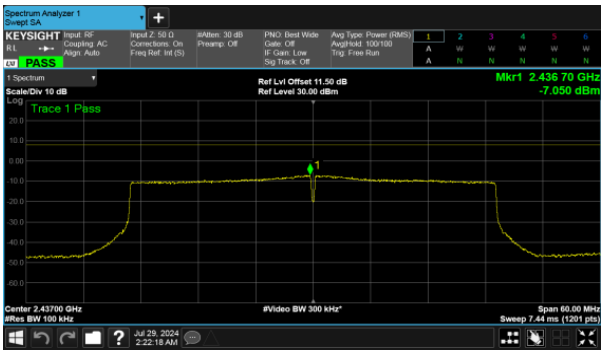
MIMO
ANT A
Modulation Type: 802.11ax40
CH03



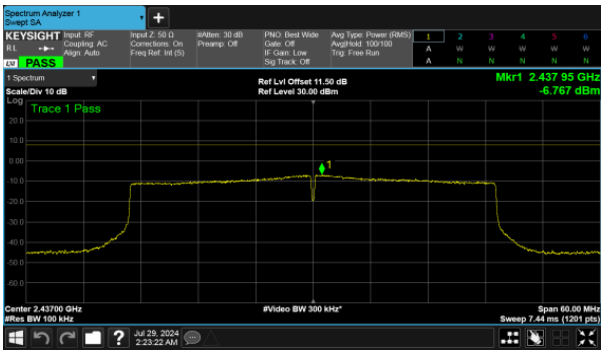
ANT B
Modulation Type: 802.11ax40
CH03



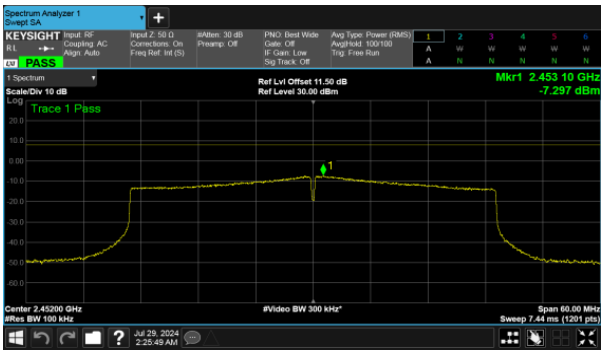
CH06



CH06



CH09



CH09